Solvency II Breakfast Briefing

Milliman research into likely impact of QIS5

Presented by
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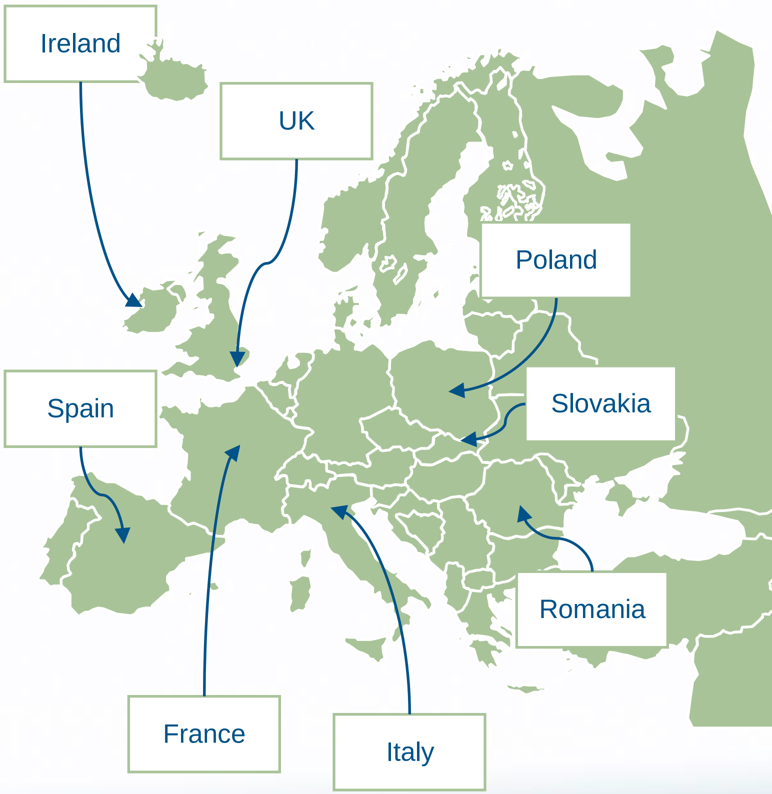
25 May 2010

Milliman

Highlights of Milliman analysis

The scope of our analysis

Life insurance markets covered by initial phase of Milliman QIS5 study



- Research across several European life markets - countries shown opposite
- Objective:
  – consider impact of standard formula on European life insurance market
  – Focused on impact of moving from QIS4 to draft QIS5 technical spec

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Highlights of Milliman analysis

Some caveats & limitations

- Limitations of the analysis:
  - Market data used in analysis is mostly based on publicly-available information
  - Non-economic assumptions used are based on our knowledge of the market and a reconciliation of our 2007 results with those published for QIS4.
  - Methodologies used have been set by our teams in the individual markets. Other approaches could also have been considered.
  - Main objective of this study is to consider the impact **relative** to a known initial situation (i.e. QIS4 at 31/12/2007). Analysis of a figure taken in isolation could lead to incorrect interpretations.

Highlights of Milliman analysis

Approach (UK)

- We have consolidated the full market for each country into a notional single life insurer. Opening balance sheet (as at 31 December 2007) represents the relevant life insurance market as at that date.

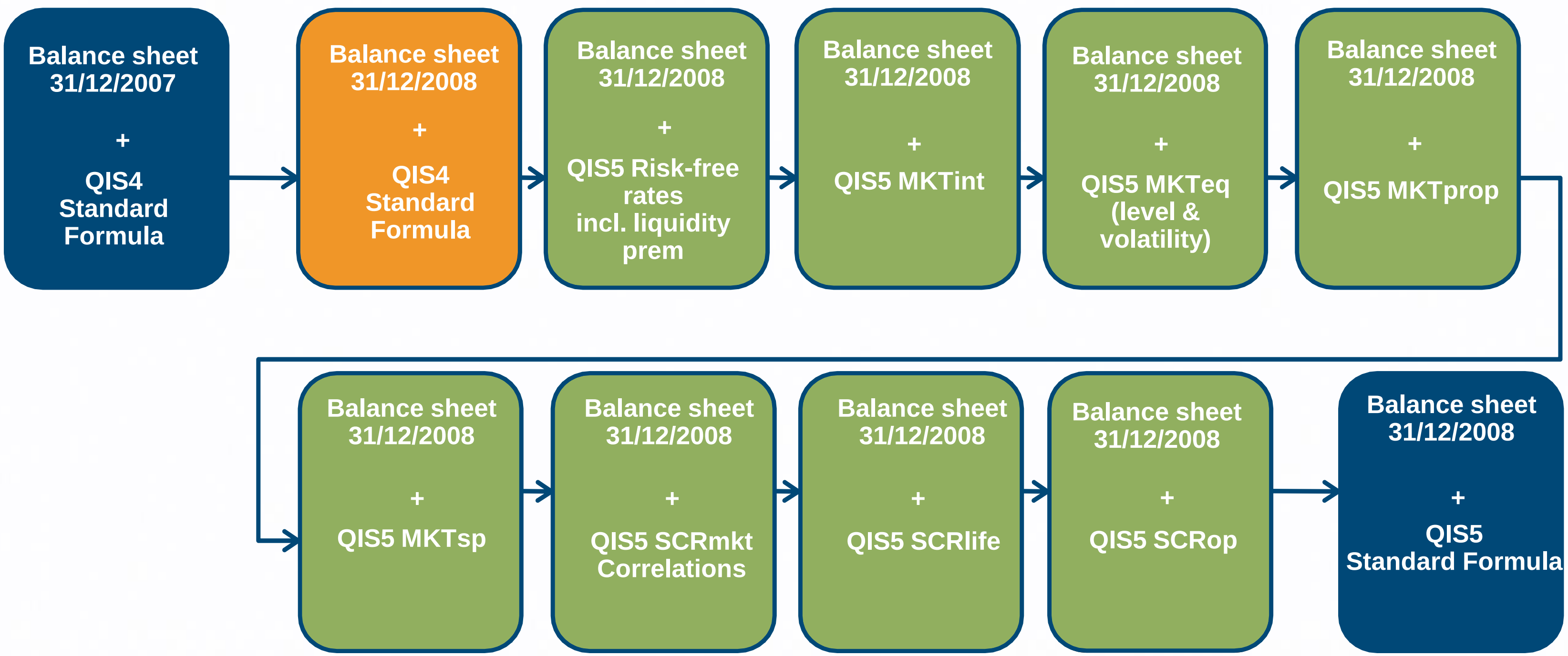
- Taking into account
  - Developments in the economic environment (over the period 31/12/2007 to 31/12/2008)
  - Development of main components of the standard formula (from our reading of the draft QIS5 technical specification)

- Analysis illustrates possible effect on a hypothetical life company. Likely effect on a company's solvency ratio will vary depending on the specific circumstances of each life insurer.

Highlights of Milliman analysis

Step-through analysis from QIS4 to QIS5

- Sequence of calculations performed during our analysis of each market:



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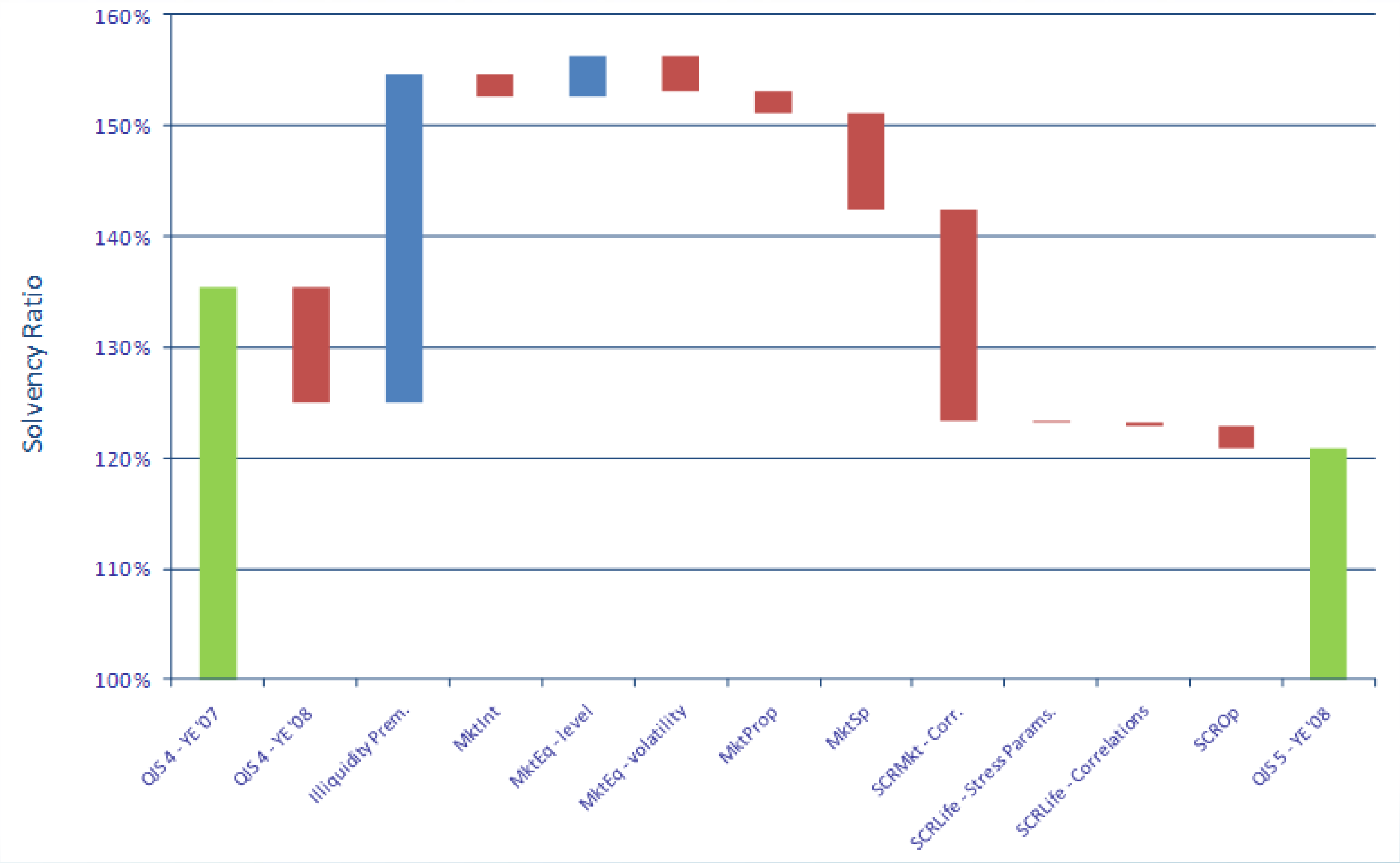
Highlights of Milliman UK analysis



Key observations from UK analysis

- Global financial crisis impacted UK - reduced solvency position 2007 - 2008.

- Inclusion of liquidity premium in valuation of best estimate liabilities
  – Large immediate annuity portfolios in UK market benefit considerably since their valuation can take credit for 100% of the liquidity premium
  – Other business (except very short-term contracts) benefits from 50% of this premium.

- Overall strengthening in market sub-modules. Driven mainly by:
  – Introduction of volatility stresses for interest rates and equity
  – Credit spread sub-module now also captures a change in liquidity premium.
  – Strengthening in correlation coefficients
  – (Slight weakening in equity levels stress due to symmetric adjustment)

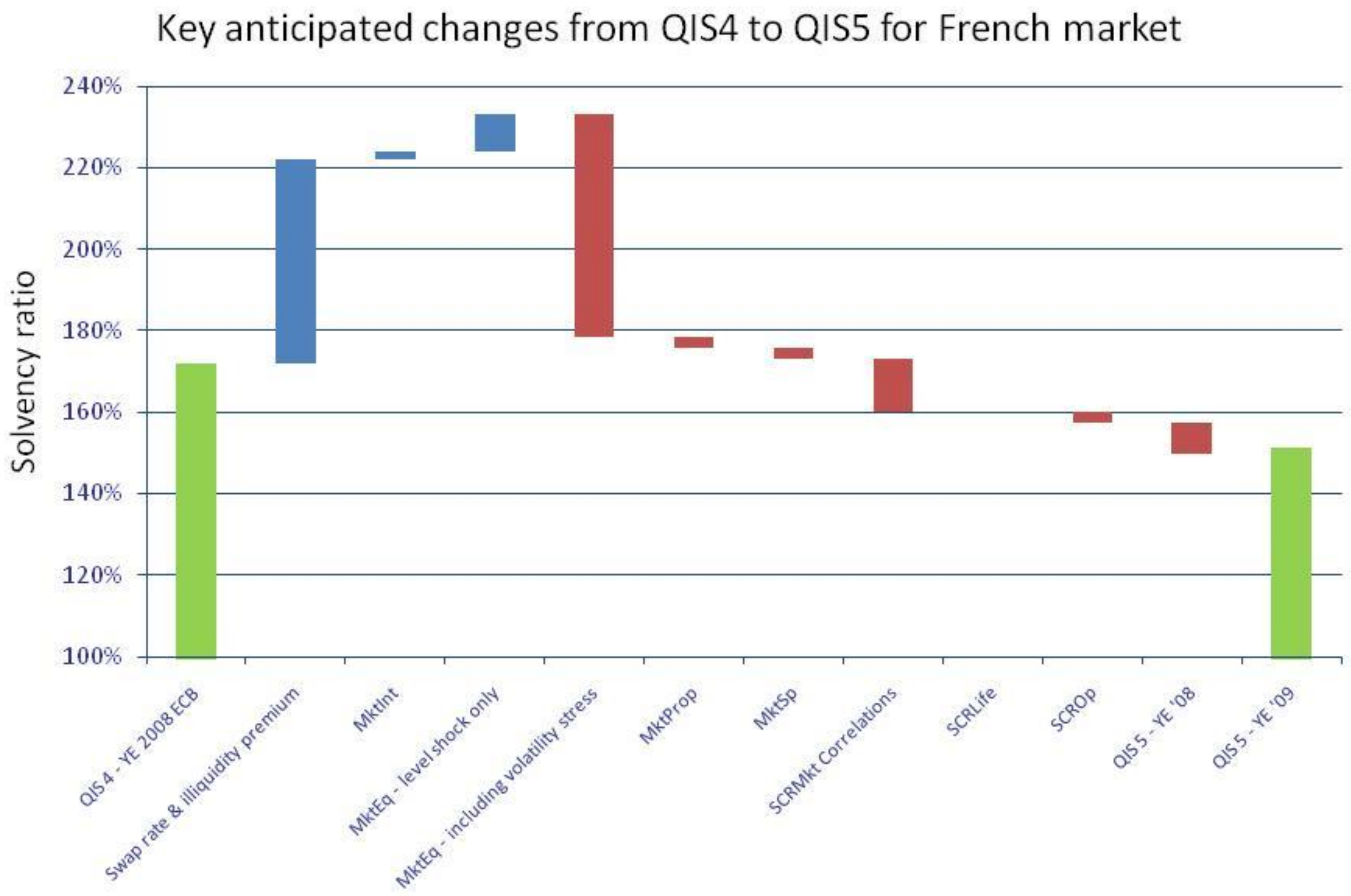
Key observations from UK analysis

- Life underwriting component
  - Changes to mortality and disability risk
  - Not significant for UK sample company, after allowing for diversification effects

- Operational risk component
  - Somewhat more conservative under QIS5.
  - Not significant for UK sample company

- Classification of subordinated debt as tier 3 capital (can be counted as Tier 1 capital up to 20% of eligible own funds)
  - No impact on UK sample company's solvency ratio
  - May be significant for some companies
  - Classification of "future profits" as tier 3 would have materially reduced solvency cover (as included in Level 2 advice)

Highlights of Milliman France analysis



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Key observations from France analysis

- Likely QIS5 market risk specification has significant impact
  - in particular the equity risk module and correlations

- Significant impact from use of a swap rates (including liquidity premium)

- From QIS4 to QIS5 (YE 2008), the solvency ratio decreases by 12% while the amount of SCR required increases by 30%. (There is an increase of own funds due to change in risk free rates and due to the inclusion of a liquidity premium)

Conclusion

- Likely decline in the QIS standard formula solvency ratios due to
  - overall strengthening of the stresses
  - outweighing the effect of uplifted risk-free rates

- UK: Declining QIS solvency exacerbated by global financial crisis
  - QIS4 2008 solvency fell from QIS4 2007 levels
  - However 2008 balance sheet structured more robustly than 2007 (which according to our calculations would have shown much worse solvency under QIS5 when compared to QIS4)

- UK changes with the largest impact - market spread & market correlations
- France - market volatility (& market correlations)

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